

United States of America  
Department of Transportation -- Federal Aviation Administration  
**Supplemental Type Certificate**

**Number**  
**ST01154WI-D**

This certificate, issued to

The Boeing Company, Wichita Division  
P.O. Box 7730  
Wichita, Kansas 67277-7730

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 25 of the Federal Aviation Regulations.

Original Product--Type Certificate Number: A20WE

Make : Boeing  
Model : 747-2G4B

**Description of Type Design Change:**

This modification installs partial provisions for High Speed Data System (HSDS) INMARSAT that include non-certified items accepted by the US Air Force (See Limitation 7). This modification includes equipment racks, rack cooling systems and associated line replaceable units (LRUs) plus three external phased array antennas. This modification also includes provisions for an HSDS control panel. This modification also includes an addition of a fourth INMARSAT, aft crown maintenance platform installation and a forward attic access panel installation. This modification is further defined by FAA Approved Boeing Document D800-10610-38, Revision New or later FAA approved revision.

**Limitations and Conditions:** (See Pages 2 & 3 of 3 Continuation Sheets)

1. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.
2. This approval should not be incorporated in any aircraft of this specific model on which other approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of those previously incorporated approved modifications will not introduce any adverse effect upon the airworthiness of the airplane.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application : September 16, 2002

Date reissued :

Date of issuance : April 11, 2003

Date amended : July 12, 2007



By direction of the Administrator

*David J. Horn*  
(Signature)

David J. Horn  
DAS-501296-CE Administrator

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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This certificate may be transferred in accordance with FAR 21.47.

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Part 25 of the Federal Aviation Regulations: (Continued)

1. The Certification basis consists of T.C.D.S. A20WE, plus Voluntary compliance has been shown with respect to the following Regulations:

14 CFR Part	Amendment Level
25.301; 25.303; 25.305; 25.471; 25.561; 25.607; 25.611; 25.773(a); 25.1307(a)(b)(c)(d); 25.1321(a) 25.1359(d) 25.1322 25.1309(a)(c)(d)(e) 25.1501(b) 25.603; 25.605; 25.789 25.307; 25.365(e1)(e2); 25.1529 25.853(a)(b) 25.29; 25.613; 25.625; 25.869(a1)(a4); 25.1581(a2)(d) 25.1316 25.365(a)(b)(d)(e)(g) 25.981(a)(b) 25.1583(c1)(c2); 25.1585(a)(b) 25.856(a)	Amendment 25-23, effective April 8, 1970  Amendment 25-32, effective May 1, 1972 Amendment 25-38, effective February 1, 1978 Amendment 25-41, effective September 1, 1977 Amendment 25-42, effective March 1, 1978 Amendment 25-46, effective October 30, 1978 Amendment 25-54 effective October 14, 1980 Amendment 25-59, effective November 26, 1984 Amendment 25-72, effective July 20, 1990  Amendment 25-80, effective May 31, 1994 Amendment 25-87, effective July 5, 1996 Amendment 25-102, effective June 6, 2001 Amendment 25-105, effective June 26, 2001 Amendment 25-111, effective September 2, 2003

2. A finding of no acoustic change as a result of this modification is identified within FAA approved Boeing Document D800-10610-37, Section 3.4.3.

Limitations and Conditions: (Continued)

3. This STC approval is for the existing configuration as defined by the approved drawing list, and as appropriate, later FAA approved minor changes reviewed and approved by the appropriate DAS-501296-CE staff members.
4. This approval is limited to the airplanes listed in Appendix 1 of Boeing Document D800-10610-38, Revision New, or later FAA approved revision.
5. Installation of this STC modification must be accomplished at the Boeing Wichita Repair Station PI2R084L utilizing Boeing Planning Paper as Installation Instructions.
6. The installation of the INMARSAT control panel and Airlink Gateway Unit (AGU) for which the provisions on this STC are intended has not been certified. Additional FAA approval is required for the installation of this equipment and must be evaluated to assure satisfactory compliance with the applicable airworthiness standards.
7. This STC includes provisions for items identified in document D800-10610-38, Section 3.5. These items are not included in the FAA approved type design drawings. The items were installed per US Air Force request, evaluation, and acceptance as deviations to the STC. The deviations are recorded on FAA Forms 8130-2, Conformity Certificate - Military Aircraft for the specific airplane installing the STC. No FAA compliance testing has been conducted for these items.

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Limitations and Conditions: (Continued)

8. Airplane Flight Manual Supplement DDS-33747.2G4-164.01, Revision New, FAA Approved June 22, 2007 or later FAA Approved Revision is required for this STC.

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END  
July 12, 2007